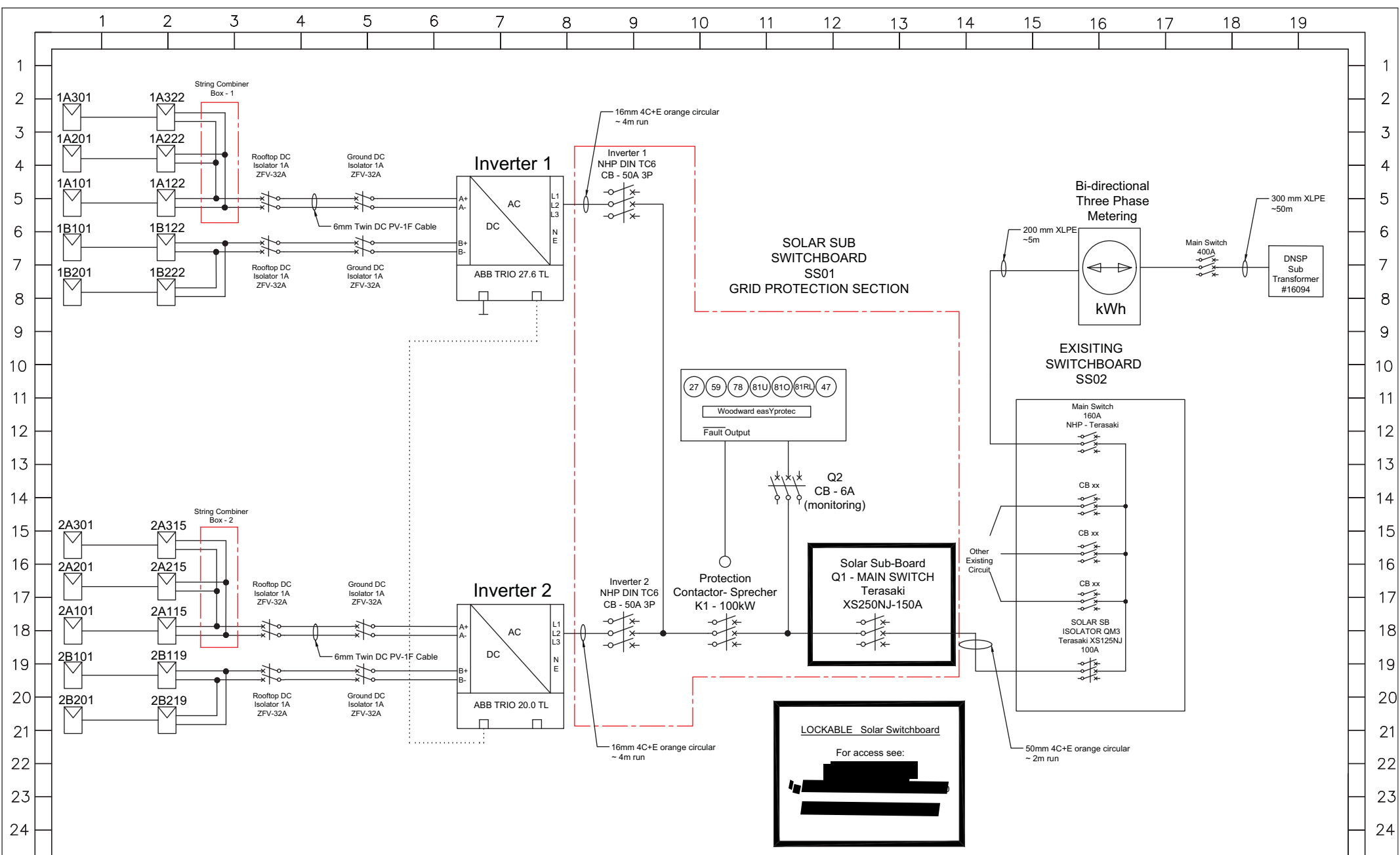




1. Technology: Solar PV
2. Maximum Power: 50 kW
3. Contribution to fault levels: N/A
4. Size & rating of the relevant Transformer: N/A
5. Single line diagram: refer to following page
6. Protection Systems & Communication Systems: refer to following page
7. Voltage Control and reactive power capability: N/A
8. Details specific to the location of facility: N/A



DATE:	JUNE 2015	CLIENT	[REDACTED]
DRAWN:	[REDACTED]	ADDRESS	[REDACTED]
REV	DATE	BY	JOB NO: 80
			DESCRIPTION: Electrical SLD

AGL ENERGY

http://www.agl.com.au/about-agl

DRAWING NO:	2	SHEET	01
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LOCKABLE Solar Switchboard

For access see:

[REDACTED]

[REDACTED]

PROJECT No: P1100-14-AU-PV
 SYSTEM NO: S-AU-1100
 DRAWING NO: 9771-1105
 CUSTOMER: [REDACTED]

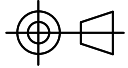
REV	DESCRIPTION	DATE	APPROVED
NEW	PRELIMINARY	19 DEC 2014	[REDACTED]
A	AS-BUILT	27-JAN-2015	[REDACTED]

SUBJECT: CONTROL WIRING
 SOLARTUNE CONTROL WITH EASYPROTEC (PROTECTION ONLY)

SHEET	CONTENTS
1	COVER AND CONTENTS
2	LEGENDS
3	SYSTEM OVERVIEW
4	DETAILED LAYOUT
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

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UNLESS OTHERWISE SPECIFIED:
 ALL DIMENSIONS ARE IN MILLIMETERS.
 DRAWING DEFINITIONS AND TOLERANCES
 SHALL BE FOUND IN SS-112.

THIRD ANGLE PROJECTION 

APPROVALS	DATE
ENGINEER [REDACTED]	28JAN15
DRAWN BY [REDACTED]	16DEC14

PM Control Systems [REDACTED]

IMPORTANT - PLEASE NOTE :
 TO PREVENT PERSONAL INJURY AND/OR PROPERTY DAMAGE, PERSONNEL USING THIS DRAWING MUST BE KNOWLEDGEABLE OF THE SYSTEM AND AWARE OF APPROPRIATE SAFETY PRACTICES. THE INFORMATION CONTAINED ON THIS DRAWING IS BELIEVED TO BE CORRECT. HOWEVER, PM CONTROL SYSTEMS PTE LTD MAKES NO REPRESENTATION, AND TAKES NO RESPONSIBILITY, FOR THE ACCURACY OF ANY INFORMATION PROVIDED BY OTHERS, OR ANY INTERFACE WIRING WHICH IS PART OF THE ORIGINAL SYSTEM, OR EQUIPMENT MODIFICATIONS OR ADDITIONS TO THE SYSTEM MADE AT ANY TIME BY OTHERS, WHETHER OR NOT ANY OF THESE EQUIPMENT MODIFICATIONS OR ADDITIONS ARE CONTAINED IN THIS DRAWING.

MATERIAL:	
REF. DWGS.	

ENGINEER	[REDACTED]	DATE	28JAN15
DRAWN BY	[REDACTED]	DATE	16DEC14

TITLE			
SOLARTUNE SOLAR INVERTER INTERFACE CONTROL COVER AND CONTENTS			
SIZE	SYSTEM PART NO.	DRAWING NO.	REV
A3	S-AU-1100	9771-1105	A
SCALE : N.T.S.			SHEET 1 OF 4

STANDARD WIRING NOTES

ALL WIRING IS $\phi 1\text{mm}^2$ UNLESS SPECIFIED OTHERWISE

- 1. WIRING IS $\phi 16\text{mm}^2$
- 2. WIRING IS $\phi 2.5\text{mm}^2$
- 3. WIRING IS $\phi 1.5\text{mm}^2$
- 4. UNLESS OTHERWISE SPECIFIED:
 - A. RELAYS SHOWN DE-ENERGISED.
 - B. RELAYS ENERGISED FOR FUNCTION.
 - C. RELAY CONTACT RATINGS:
 - 8.0A AT 28VDC
 - 8.0A AT 110VDC
 - 8.0A AT 250VAC

- 5. 120Ω RESISTOR
- 6. CUSTOMER PROVIDE WIRING.
- 7. DASHED LINES INDICATE CUSTOMER FIELD WIRING.
- 8. CUSTOMER SUPPLIED
- 9. EXISTING
- PM. PM CONTROL SUPPLIED

CABLE LABELLING IS USED TO BE (MATERIAL) TRAFFOLYTE.
ALL FIELD WIRING ARE PROVIDED BY CUSTOMER.



MISCELLANEOUS ABBREVIATIONS

- FTM - FIELD TERMINAL MODULE
- SHLD - SHIELD
- I.S - INTRINSICALLY SAFE

ELECTRICAL SYMBOLS USED

	SINGLE POLE MCB		COMMUNICATION CABLE (RS485)
	DOUBLE POLE MCB		COMMUNICATION CABLE (ETHERNET STRAIGHT)
	TRIPLE POLE MCB		TERMINAL BLOCK
	RELAY COIL		TERMINAL BLOCKS TIED
	CONTACT, NORMALLY OPEN		TEST TERMINAL BLOCK
			TO SAFETY GROUND
	DIODE (NOT USED)		CHASSIS GROUND (NOT USED)
	415VAC WIRE PHASE L1 (BROWN)		INSTRUMENT GROUND (NOT USED)
	415VAC WIRE PHASE L2 (BLUE)		I.S EARTH BAR (NOT USED)
	415VAC WIRE PHASE L3 (GREY)		WIRES NOT JOINED
	415VAC WIRE NEUTRAL (BLACK)		WIRES JOINED
	+24VDC (RED)		SIGNAL CABLE SHIELD (NOT USED)
	24VDC COMMON (BLACK)		

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN MILLIMETERS. DRAWING DEFINITIONS AND TOLERANCES SHALL BE FOUND IN SS-112.		THIRD ANGLE PROJECTION	PM Control Systems	
APPROVALS		DATE	TITLE	
ENGINEER		22JAN15	SOLARTUNE SOLAR INVERTER INTERFACE CONTROL	
DRAWN BY		16DEC14	LEGENDS	
MATERIAL:			SIZE	SYSTEM PART NO.
			A3	S-AU-1100
			DRAWING NO.	9771-1105
			REV	A
REF. DWGS.			SCALE :	N.T.S.
			SHEET	2 OF 4

1 2 3 4 5 6 7 8

A A

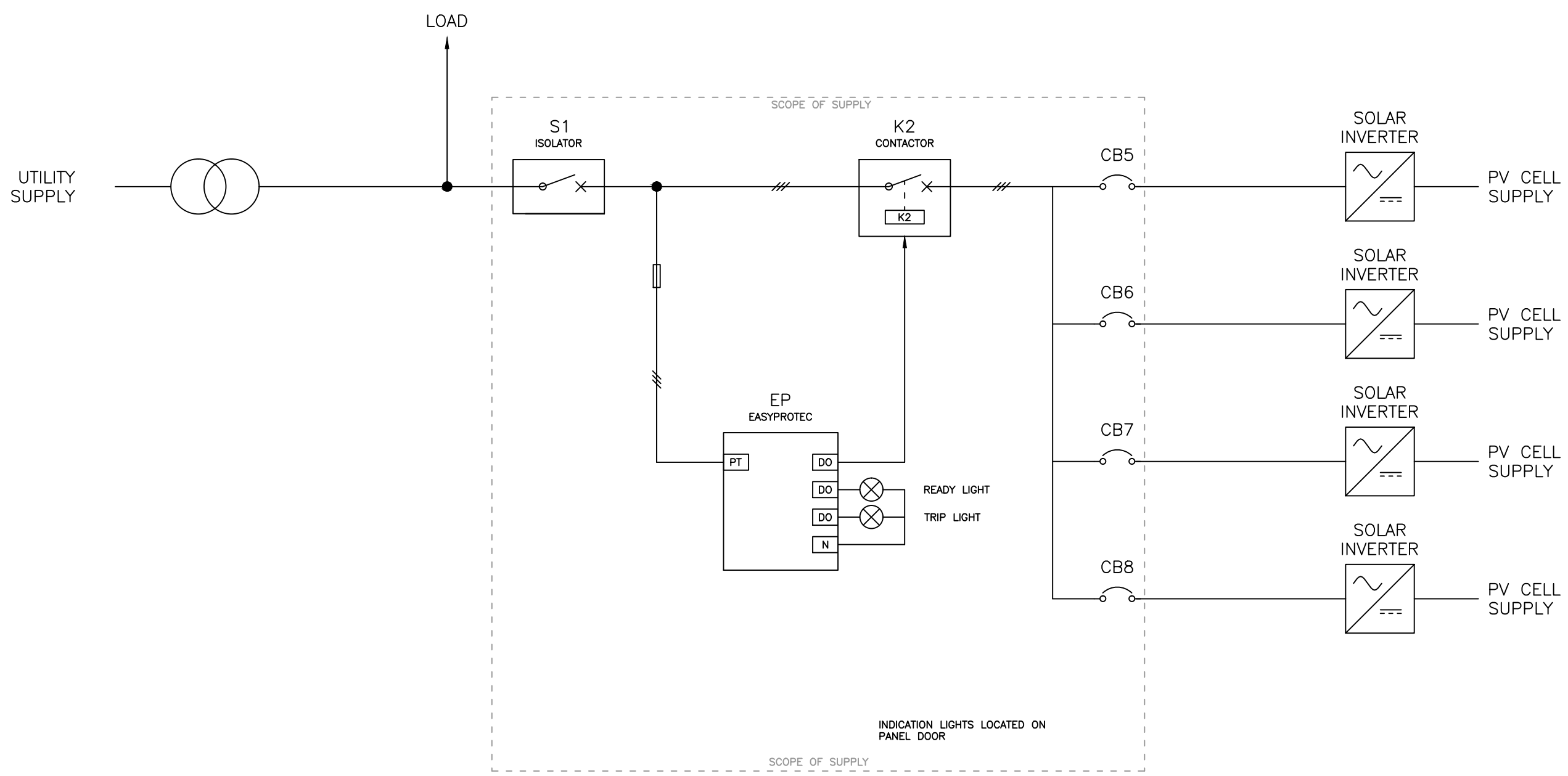
B B

C C

D D

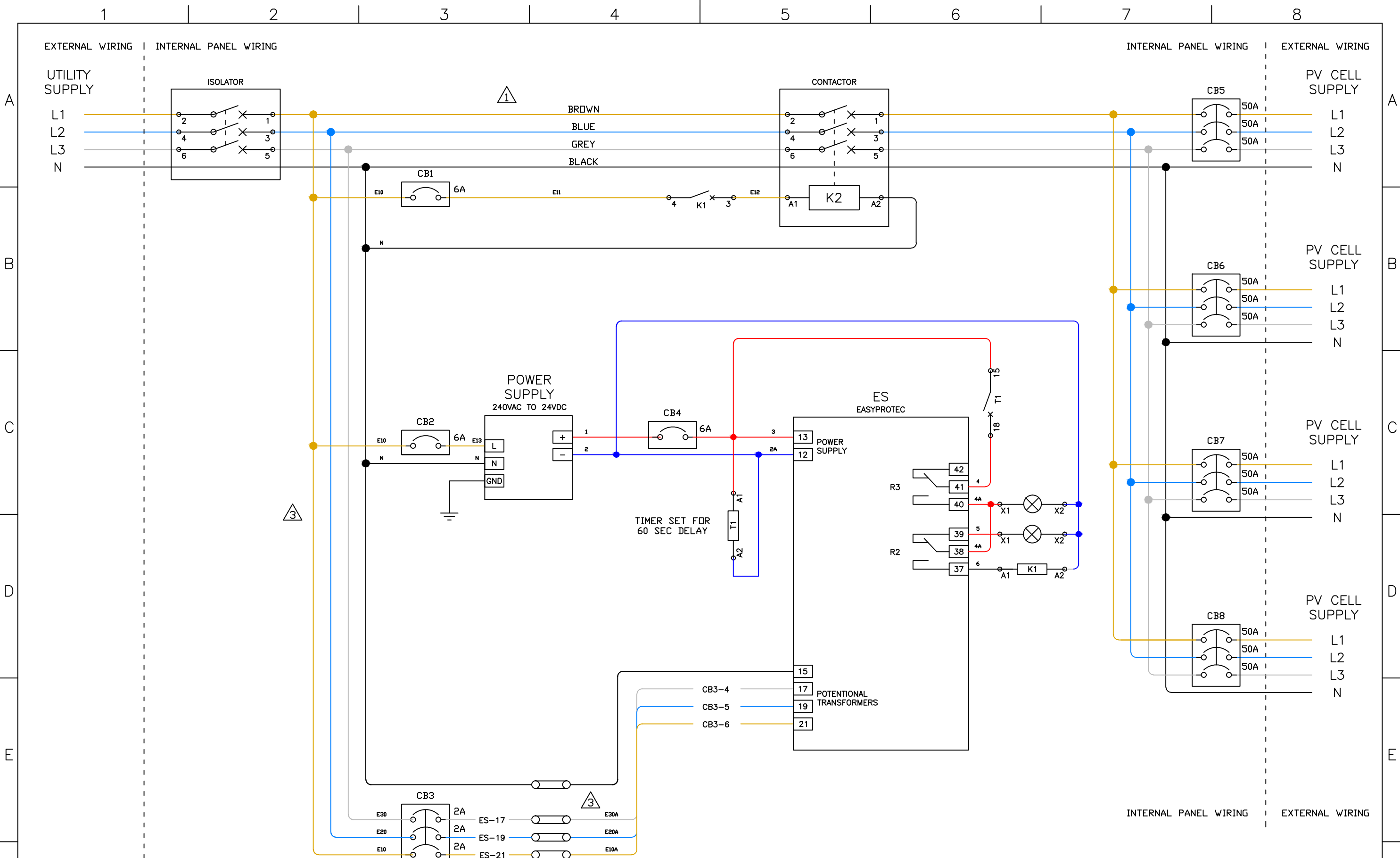
E E

F F



UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN MILLIMETERS. DRAWING DEFINITIONS AND TOLERANCES SHALL BE FOUND IN SS-112.		THIRD ANGLE PROJECTION		PM Control Systems 	
		APPROVALS ENGINEER DATE 07JAN15 DRAWN BY 16DEC14		TITLE SOLARTUNE SOLAR INVERTER INTERFACE CONTROL SYSTEM OVERVIEW	
MATERIAL:		SIZE A3	SYSTEM PART NO. S-AU-1100	DRAWING NO. 9771-1105	REV A
REF. DWGS.		SCALE: N.T.S.		SHEET 3 OF 4	

1 2 3 4 5 6 7 8



UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN MILLIMETERS. DRAWING DEFINITIONS AND TOLERANCES SHALL BE FOUND IN SS-112.		THIRD ANGLE PROJECTION		PM Control Systems 	
		APPROVALS ENGINEER DATE 22JAN15 DRAWN BY 16DEC14		TITLE SOLARTUNE SOLAR INVERTER INTERFACE CONTROL DETAILED LAYOUT	
MATERIAL:		SIZE A3	SYSTEM PART NO. S-AU-1100	DRAWING NO. 9771-1105	REV A
REF. DWGS.		SCALE: N.T.S.		SHEET 4 OF 4	